

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Serial No.: (To be assigned)

Group Art Unit: 1754

Filed: October 21, 2003

For: "Method for Reducing Emissions from Evaporative Emissions Control  
System"

Examiner: (To be assigned)

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Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

**STATEMENT OF STATUS AND SUPPORT FOR ALL CHANGES TO THE CLAIMS**

Dear Sir:

The above-described application is an application for reissue of U.S. Patent No. 6,540,815 (the '815 patent), which issued with process claims 1-30 as originally filed, on April 1, 2003. This application was filed, under 35 U.S.C. §251, to correct an error in the '815 patent, which was made without any deceptive intention, where, as a result of the error, the patent may be deemed wholly or partly inoperative or invalid by reason of the patentee claiming more or less than he had a right to claim in the patent. The error in the patent arises out of an error in conduct, which error was made in the preparation of the application which became the '815 patent.

The specification of the patent discloses a process for sharply reducing diurnal breathing loss emissions from evaporative emissions control system canisters by the use of multiple layers, or stages, of adsorbents. The disclosed and claimed process specifies that on the fuel source-side of the canister, standard high working capacity carbons are preferred;

whereas, on the vent-side, the preferred adsorbent volume exhibits a flat or flattened adsorbent isotherm on a volumetric basis in addition to certain characteristically desirable adsorptive properties across broad vapor concentrations, specifically relatively low incremental capacity at high concentration vapors compared with the fuel source-side adsorbent volume. (See the Summary of the Invention at col. 3, lines 39-60.)

The discussion of the "Description of Related Art" beginning at col. 4, line 1 includes a review of state-of-the art methods and canisters for reducing auto emissions of volatile organics. It was shown that no prior art document either taught or suggested the method, as claimed, and/or the canister, as disclosed, to be included in prior art auto emission control systems. In particular, the prior art canisters taught adsorbents, whether of a single component or material or of a mixture of materials, of uniform character and properties. More particularly, a review of the prior art canisters using activated carbon as the adsorbent shows that increased adsorption (and retention) of volatile organics from the fuel (whether emanating from the gas tank or from the engine) to have been achieved by increasing the activity of the carbon adsorbent. Thus, it was surprising and unexpected to find, as did the applicants of the '815 patent and the instant reissue application, that providing a lower activity carbon adsorbent in the canister in an after-position (in relation to vapor flow through the canister) to the higher activity carbon adsorbent therein to effectively reduce the problem of diurnal bleeding of volatile organics from the emission control system canister.


In light of the applicants' disclosure in view of the prior art teaching, all of the original claims (1-30) were allowed and subsequently issued in the '815 patent.

It has now been appreciated that the patentees claimed less than they had a right to claim in the '815 patent, necessitating the instant application for reissue. Specifically, the

subject matter of the invention of the '815 patent and the application from which it sprang, as originally filed, disclosed more than the process as claimed. Throughout the application disclosure, novel and unobvious elements of the process were disclosed, but went unclaimed. In particular, the disclosure beginning at col. 9, line 12 through col. 10, line 41, which discloses a particular embodiment of the improved canister adsorbent configuration in the context of an improvement of the auto emissions control system (new claims 31 - 42) and, within such disclosure, one embodiment of the canister element in the disclosed auto emission induction system (new claims 43 - 54). This reissue application is made, under 35 U.S.C. §251, for the purpose of claiming such subject matter.

Therefore, newly added claims 31-42 claim the disclosed canister successive (or sequential) adsorbent orientation as an improvement in an auto emission control system, and newly added claims 43-54 claim the disclosed embodiment of the canister element of the subject matter of the invention. It is respectfully submitted that, for their patentability status as useful, novel, and unobvious over the prior art, as required in Title 35, U.S. Code, newly added claims 31-54 are in condition for allowance. Such action by the Examiner is earnestly solicited.

Respectfully submitted,

  
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